

# MASON CITY COAL GASIFICATION PLANT

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EPA ID# IAD980969190

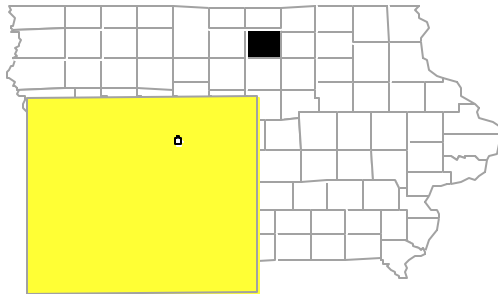
EPA Region 7

City: Mason City

County: Cerro Gordo County

Other Names: Coal Gasification Plant

08/26/2002



## SITE DESCRIPTION

The Mason City Coal Gasification Plant site is located on approximately 2 1/3 acres in a commercial and residential area of central Mason City, a north-central Iowa community of 29,000. Mason City Coal Gasification Plant operated from 1900 to 1951, and was demolished in 1952. An electrical substation and a small storage building are all that remain on the site. During a 1984 sewer installation, oily sludges were discovered in subsurface soil at the site. Investigations by the current site owner, Alliant Energy Corporation (formerly Interstate Power Company), revealed three underground storage tanks containing oily sludge. The tanks and contaminated soil were exhumed and stored on the southeast corner of the site and covered with a membrane cap. Contaminated soil is also present in the north-central portion of the site. The site is situated on fill material consisting of sand, gravel, and construction rubble and debris, and is in direct contact with bedrock. Although the level of the water table fluctuates seasonally, the water table in the fill material is typically present at depths ranging from 8 to 10 feet below the surface. A portion of the groundwater flows through the fill and empties into Willow Creek, which is used for public recreational fishing. Eight Mason City municipal drinking water wells are located within 2 miles of the site. Approximately 98 percent of Mason City is supplied by the municipal drinking water supply.

### Site Responsibility:

This site is being addressed through Federal and potentially responsible parties' actions.

### NPL LISTING HISTORY

**Proposed Date:** 01/18/1994

**Final Date:** 12/16/1994

Deleted Date:

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## THREATS AND CONTAMINANTS

The soil, on-site waste pile, bedrock, and groundwater are contaminated with polynuclear aromatic hydrocarbons (PAHs). Soil samples collected indicate that the soil is contaminated to a depth of 13 1/2 feet. A series of investigations between 1986 and 1993 by Interstate Power Company identified high concentrations of PAHs in samples of groundwater taken from the uppermost aquifer and in samples of Willow Creek sediment downstream from the site. Ingesting or coming into direct contact with contaminated soil or groundwater could pose a public health threat.

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## CLEANUP APPROACH

### Response Action Status

Initial Actions: In late 1988, the potentially responsible parties excavated three underground storage tanks and surrounding contaminated soil, moved them to the southeast corner of the site, and covered them with a membrane cap. Excavation and thermal treatment of contaminated soil and the waste pile was completed in November 1996.

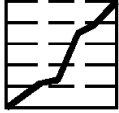
Groundwater: In late 1991, the potentially responsible parties began investigating the nature and extent of site contamination. This study was completed in 1994. Periodic sampling of groundwater will continue for a minimum of two years following removal of the contaminated soils and the waste pile. A final cleanup remedy was selected in September 2000 to address groundwater contamination. The remedy selected was monitored natural attenuation of groundwater.

**Site Facts:** Interstate Power Company signed an Administrative Order on Consent with the EPA in October 1991. Under this order, Interstate Power Company agreed to determine the extent of contamination at the site and assist the EPA in evaluating cleanup options. In 1995, Interstate Power Company, Kansas City Power & Light Company, Bob McKiness Grading and Excavating, Inc., and the City of Mason City signed an Administrative Order on Consent with EPA for removal of source materials and

post-removal groundwater monitoring.

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## ENVIRONMENTAL PROGRESS



The removal of contaminated soil and several storage tanks has made the Mason City Coal Gasification Plant safe while groundwater monitoring continues.

The groundwater remedy at the site recognizes that natural attenuation of the contamination is occurring and is an acceptable remedy. Groundwater monitoring will be conducted for an extended period of time to verify the on-going effectiveness of this remedy.

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## SITE REPOSITORY



Mason City Public Library  
225 2nd Street S.E.  
Mason City, IA 50401

Superfund Records Center  
901 N. 5th St.  
Kansas City, KS 66101  
Mail Stop SUPR  
(913)551-4038

## REGIONAL CONTACTS

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## MISCELLANEOUS INFORMATION

**STATE:**

IA

076B

**CONGRESSIONAL DISTRICT:**

02

**EPA ORGANIZATION:**

SFD-IANE/SUPR

## MODIFICATIONS